Water, Wastewater, and Roadway Impact Fee Study Updates

CITY OF COLLEGE STATION
Home of Texas A&M University®

FREESE AND NICHOLS

Kimley»Horn

Nov. 22, 2021

Kimley»Horn

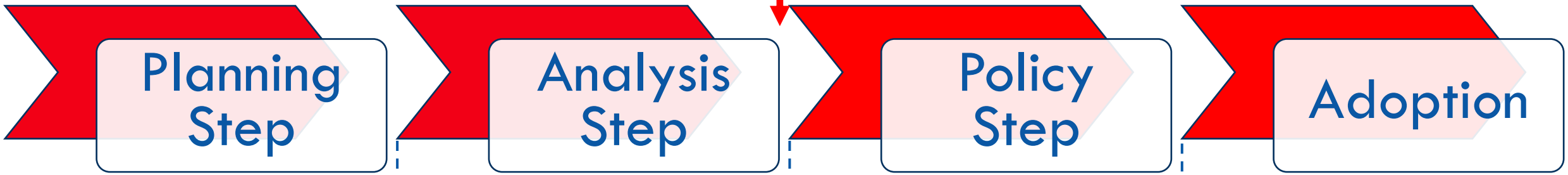
Outline

- The Impact Fee Process
- Schedule
- Water and Wastewater LUA, CIP, & Impact Fee Calculation
- Roadway LUA, CIP, & Impact Fee Calculation
- Impact Fee Advisory Committee (IFAC) Comments

The Impact Fee Process

Impact Fee Process

We are here in the process



Land Use Assumptions

Impact Fee Capital Improvements Plan

Calculation of Maximum Assessable Impact Fee

Establishing the Impact Fee

Amend Impact Fee Ordinance

Schedule

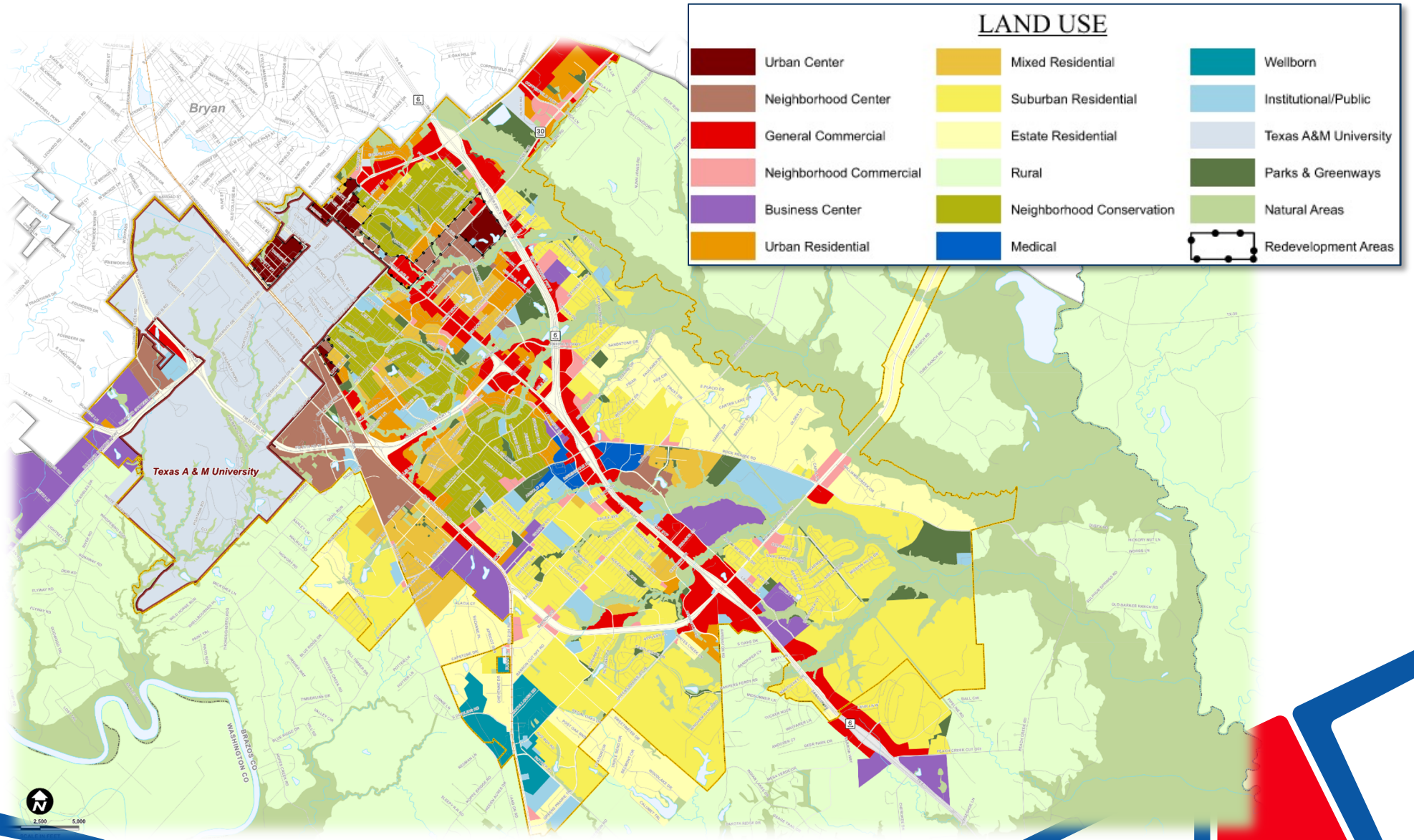
Schedule

	Date	Council Meetings
✓	7/29/21	Stakeholder 101 Discussion
✓	8/5/21	IFAC Impact Fee 101
✓	8/23/21	Stakeholder Workshop on LUA and IF CIP
✓	9/2/21	IFAC Workshop to Review LUA and IF CIP
✓	9/23/21	Council Workshop (LUA & IF CIP)
✓	10/14/21	Council Resolution to Set Public Hearing Date for Impact Fee Studies
✓	11/4/21	IFAC Review of Impact Fee Studies
✓	11/11/21	IFAC Written Comments Due
•	**11/22/21**	**Council Public Hearing, Consideration of Impact Fee Studies, and Update Ordinance**

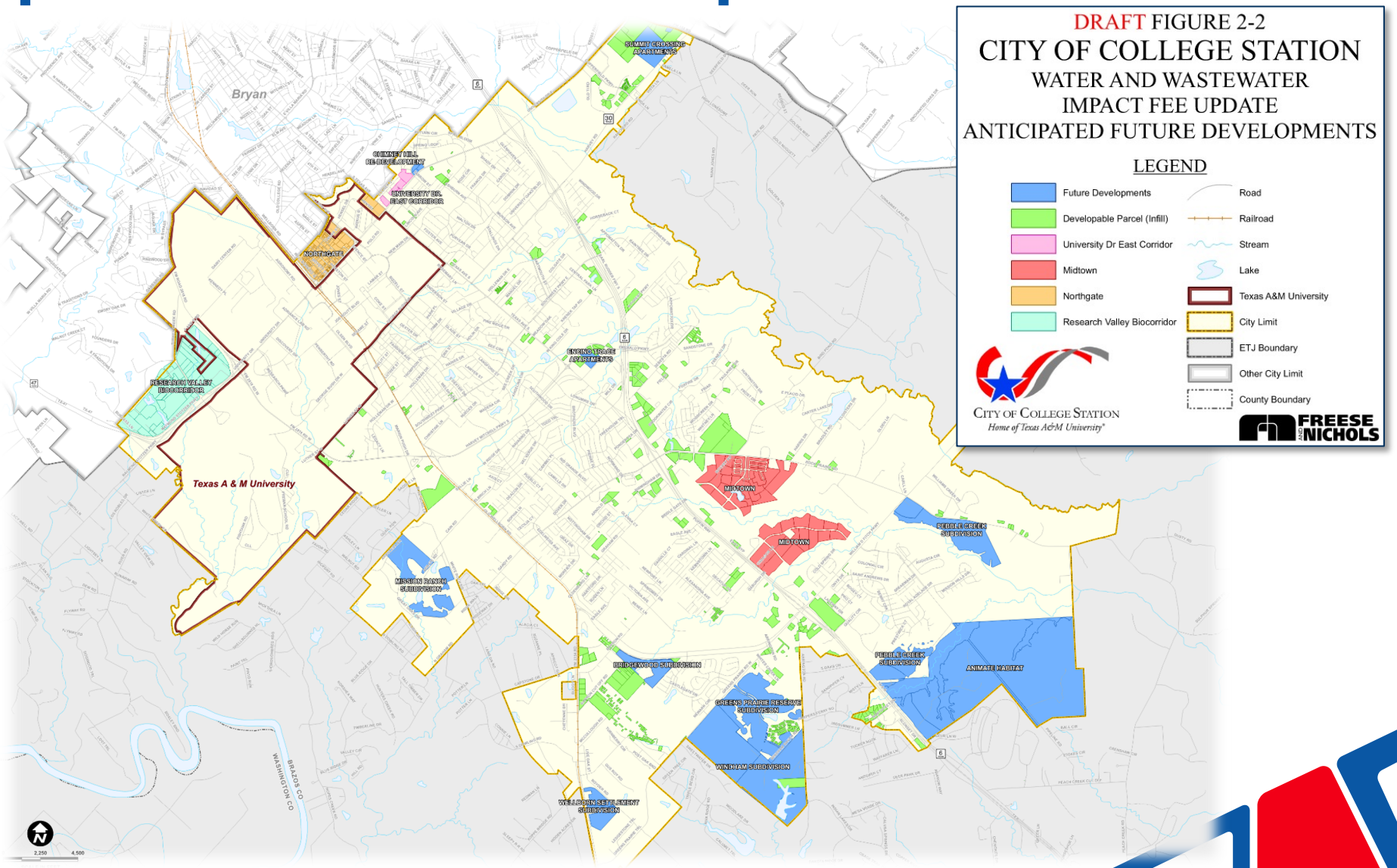
Water and Wastewater

Land Use, CIP, and Impact Fee Calculation

Land Use Assumptions



Anticipated Future Developments



Living Unit Equivalents (LUEs)

A standardized measure of consumption attributable to an individual unit of development.*

Water	Wastewater
	

*Chapter 395 definition for service unit

College Station refers to service units as living unit equivalents (LUEs)

Water and Wastewater Living Unit Equivalent

5/8”x 3/4”

=

2”

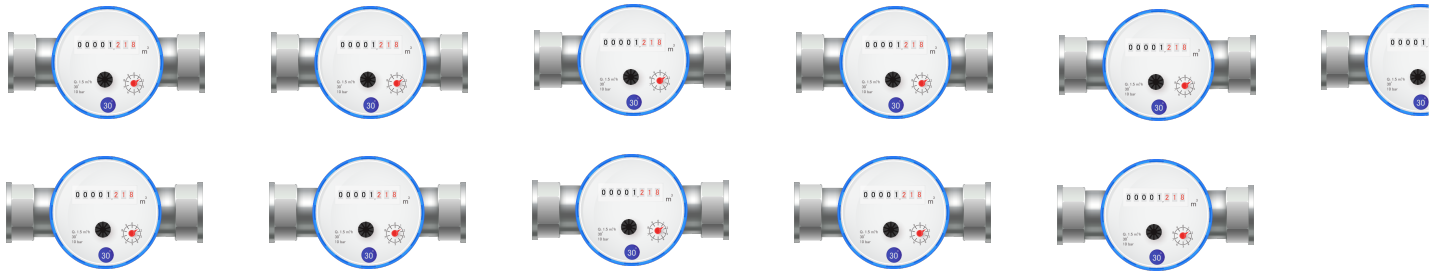
=

Water and Wastewater Living Unit Equivalent

2”

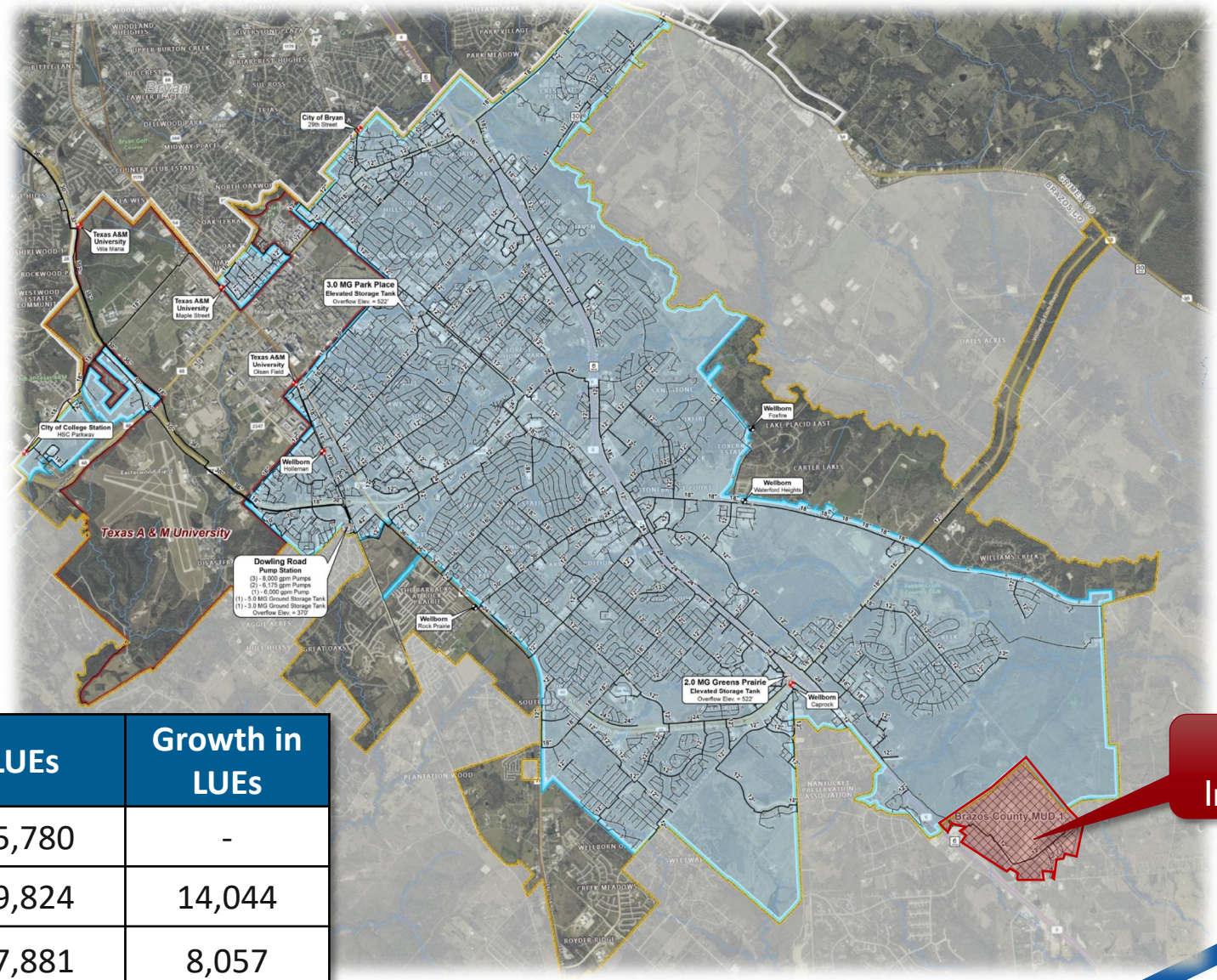
=

5/8” x 3/4”



=

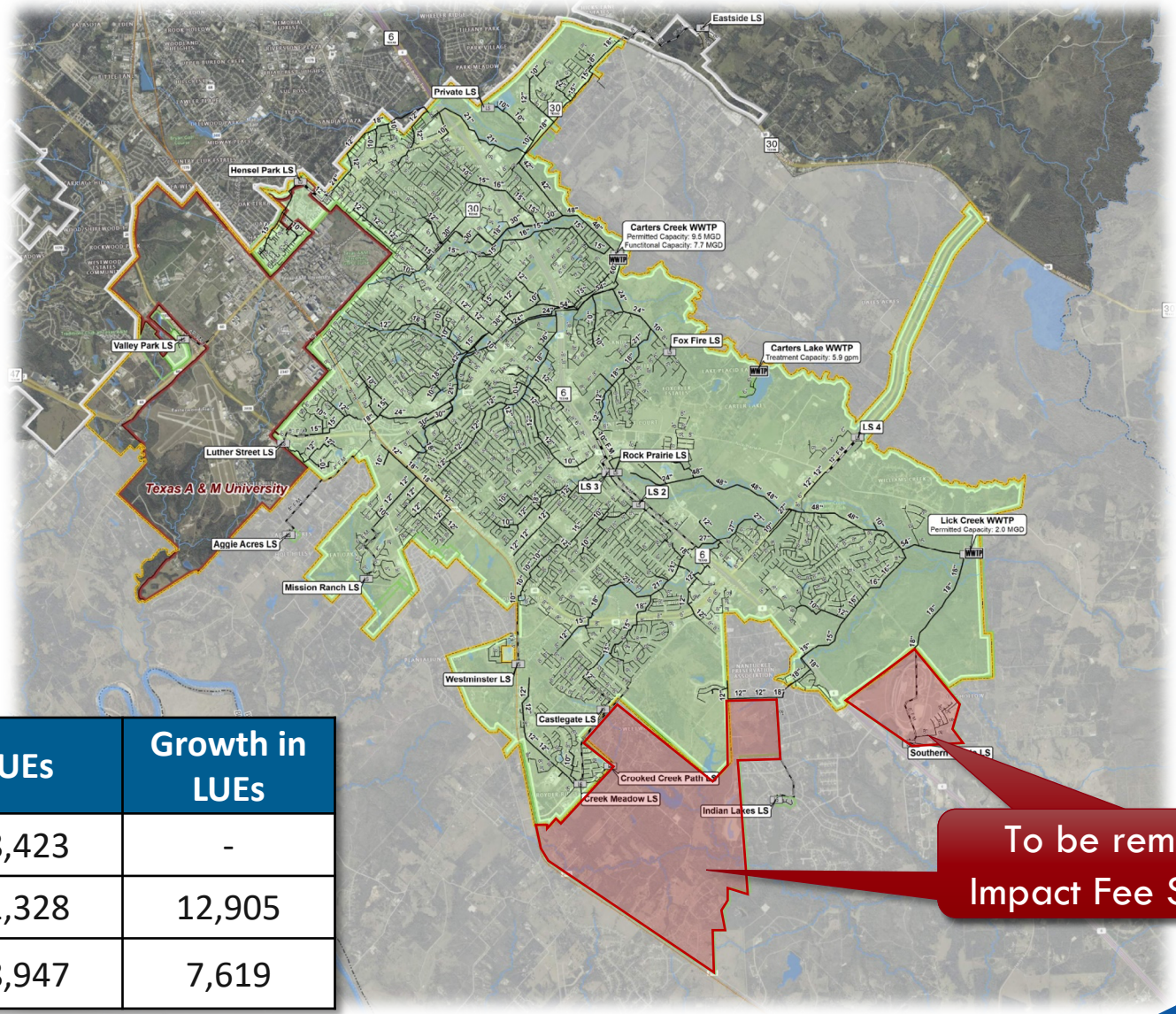
Water Impact Fee Service Area



Year	LUEs	Growth in LUEs
2021	55,780	-
2031	69,824	14,044
Buildout	77,881	8,057

To be removed from Impact Fee Service Area

Wastewater Impact Fee Service Area



Year	LUEs	Growth in LUEs
2021	58,423	-
2031	71,328	12,905
Buildout	78,947	7,619

Capital Improvements Plan (CIP)

What items **are** and **are not** payable with Impact Fees?

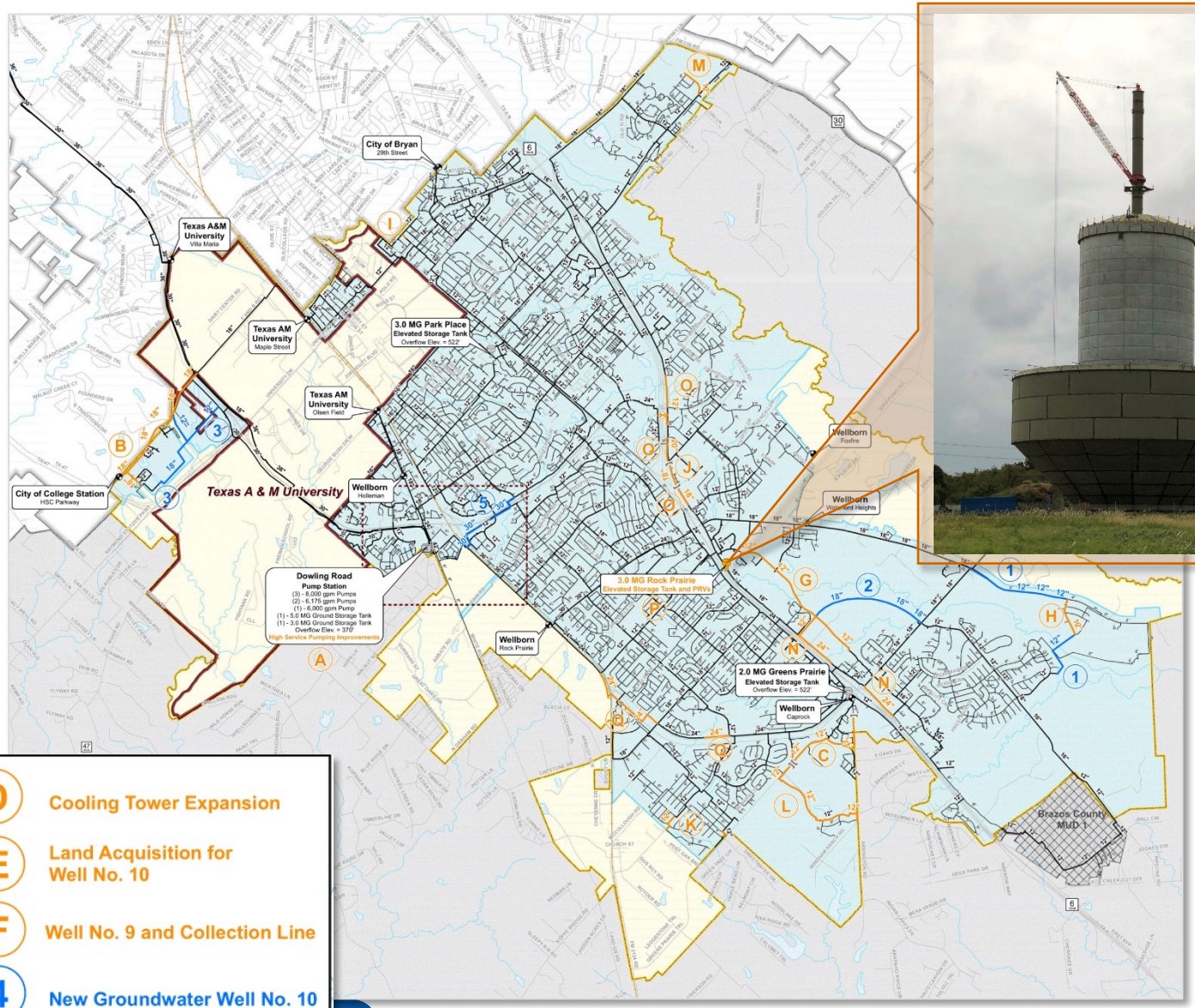
Components that ***can*** be paid for through an impact fee program:

- ✓ Construction cost of capital improvements on the Impact Fee CIP
  - Roadway to thoroughfare standard
  - Upsized water/wastewater line
  - Traffic signals, bridges, sidewalks, etc.
- ✓ Survey and Engineering fees
- ✓ Land acquisition costs, including court awards
- ✓ Debt Service of Impact Fee CIP
- ✓ Planning Studies

Components that ***cannot*** be paid for through an impact fee program:

- Projects not included in the Impact Fee CIP
- Repair, operation, and maintenance of existing facilities
- Upgrades to serve existing development
- Administrative costs of operating the impact fee program

Water Impact Fee CIP



D Cooling Tower Expansion

E Land Acquisition for Well No. 10

F Well No. 9 and Collection Line

4 New Groundwater Well No. 10

DRAFT FIGURE 3-1

CITY OF COLLEGE STATION

WATER IMPACT FEE UPDATE
CAPITAL IMPROVEMENTS PLAN

LEGEND

Impact Fee Eligible Project
- Water Line

Ongoing/Recently Completed Improvements
- Pressure Relief Valve
- Water Tank
- Water Line

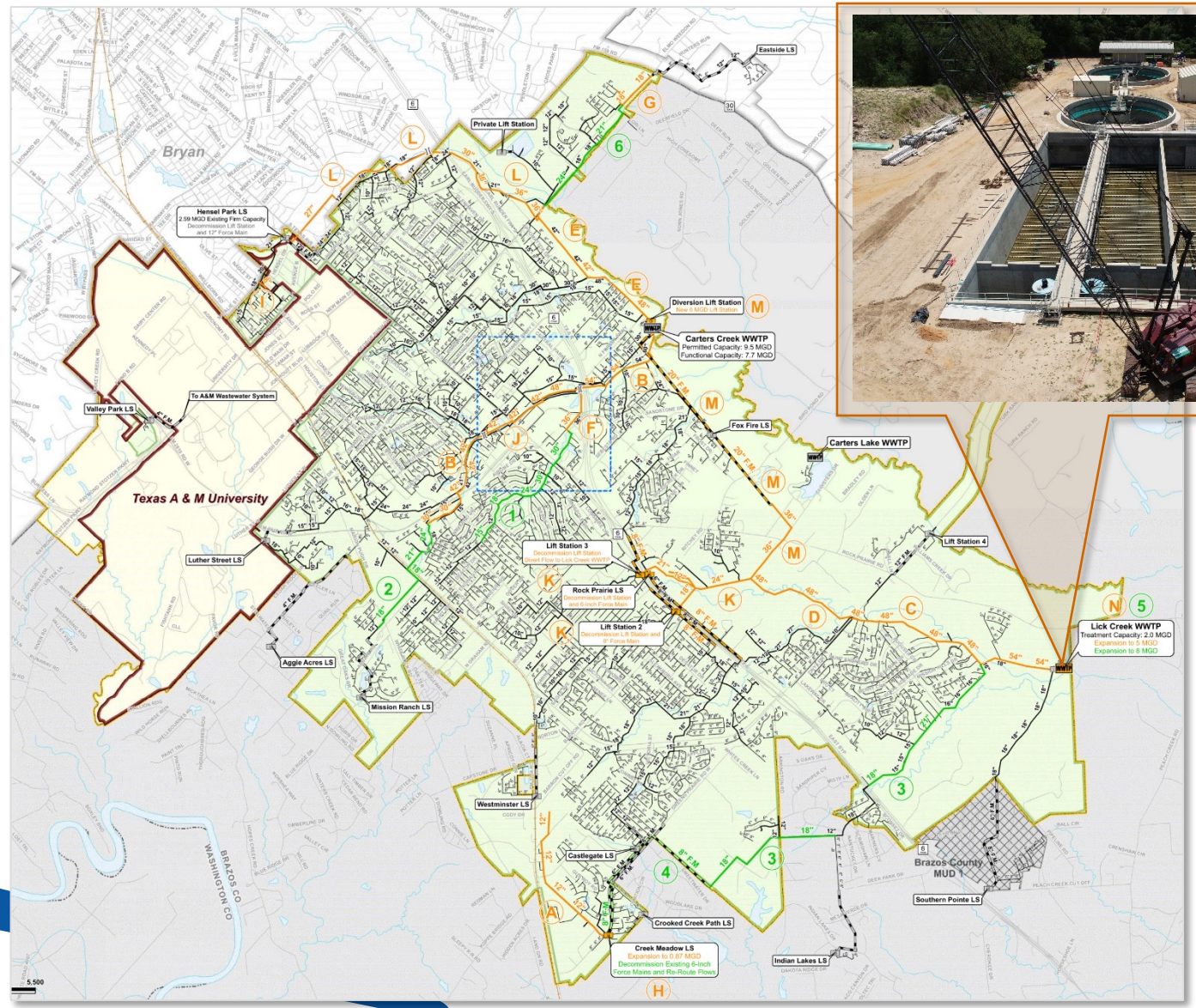
Existing Water System
- Interconnect
- Elevated
- Ground
- Pump Station
- 8" and Smaller Water Line
- 10" and Larger Water Line

- Road
- Railroad
- Stream
- Lake
- Water Impact Fee Service Area
- Brazos County MUD 1
- Texas A&M University
- City Limit
- ETJ Boundary
- Other City Limit
- County Boundary

FREESE AND NICHOLS

CITY OF COLLEGE STATION
Home of Texas A&M University®

Wastewater Impact Fee CIP



DRAFT FIGURE 3-2

CITY OF COLLEGE STATION

WASTEWATER IMPACT FEE UPDATE
CAPITAL IMPROVEMENTS PLAN

LEGEND

Ongoing/Recently Completed Improvements
- Lift Station
- Wastewater Treatment Plant
- Gravity Main
- Force Main

Impact Fee Eligible Improvements
- Gravity Main
- Force Main

Existing Wastewater System
- Lift Station
- Wastewater Treatment Plant
- 8" and Smaller Wastewater Line
- 10" and Larger Wastewater Line
- Force Main
- Road
- Railroad
- Stream
- Lake
- Wastewater Impact Fee Service Area
- Brazos County MUD 1
- Texas A&M University
- City Limit
- ETJ Boundary
- Other City Limit
- County Boundary

FREESE AND NICHOLS

CITY OF COLLEGE STATION
Home of Texas A&M University

Impact Fee Calculation

Impact Fee Equation:

$$\text{Impact Fee Per LUE} = \frac{\text{Eligible CIP Cost} - \text{Rate Credit}}{\text{Growth in LUEs}}$$

LUE = Living Unit Equivalent (connection for a single-family home)

Eligible CIP Cost = 10-year capital and financing cost (through 2031)

Rate Credit = Chapter 395 requirements: reduce the ***eligible CIP cost*** by performing a credit analysis to determine the percent of utility bill used for growth CIP

Growth in LUEs = Derived from land use assumptions for 10-year growth in LUEs

Impact Fee Calculation – Eligible Water CIP Cost

Determine Utilization Percentages - Water

10-Year Utilization x Capital Cost = 10-Year Cost

No.		Description of Project	Percent Utilization			Costs Based on 2021 Dollars	
			2021	2031	2021-2031	Capital Cost	10-Year (2021-2031)
Recently Completed	A	High Service Pumping Improvements	20%	60%	**40%**	$ 3,597,227	$ 1,438,891
	B	BioCorridor Water Line	25%	100%	**75%**	$ 998,884	$ 749,163
	C	Area 2 Water Line Extension	10%	35%	**25%**	$ 1,000,000	$ 250,000
	D	Cooling Tower Expansion	25%	100%	**75%**	$ 3,795,667	$ 2,846,750
	E	Well No. 10 Land Acquisition	0%	95%	**95%**	$ 1,048,633	$ 996,201
	F	Well No. 9 and Collection Line	25%	100%	**75%**	$ 7,623,202	$ 5,717,402
	G	Midtown Drive 12-inch Water Line	20%	70%	**50%**	$ 920,000	$ 460,000
	H	The Crossing at Lick Creek Phase 1 - 3 Oversize Participation	45%	90%	**45%**	$ 45,233	$ 20,355
	I	Embassy Suites Water Line Oversize Participation	10%	100%	**90%**	$ 15,030	$ 13,527
	J	Brazos Valley Auto Complex Oversize Participation	40%	70%	**30%**	$ 84,791	$ 25,437
	K	Castlegate II Oversize Participation	45%	100%	**55%**	$ 50,871	$ 27,979
	L	Greens Prairie Oversize Participation	10%	35%	**25%**	$ 96,498	$ 24,125
	M	Summit Crossing Phase 3A Oversize Participation	15%	100%	**85%**	$ 32,550	$ 27,668
	N	SH 6 Water Line Phase 1 and 2	40%	70%	**30%**	$ 1,036,568	$ 310,970
					Recently Completed Project Subtotal	$ 20,345,154	$ 12,908,468
Ongoing	O	SH 6 Water Line Phase 3	40%	70%	**30%**	$ 3,050,000	$ 915,000
	P	3.0 MG Elevated Storage Tank and Pressure Reducing Valves	40%	70%	**30%**	$ 8,690,000	$ 2,607,000
	Q	SH 40 Water Line Phase 1 and 2	35%	100%	**65%**	$ 4,200,000	$ 2,730,000
	R	2021 Impact Fee Study	0%	100%	**100%**	$ 150,000	$ 150,000
					Ongoing Project Subtotal	$ 16,090,000	$ 6,402,000
Proposed	1	New and Replacement 12-inch Rock Prairie Road Water Line	45%	85%	**40%**	$ 2,289,500	$ 915,800
	2	New 18-Inch Midtown Business Center Water Line	20%	90%	**70%**	$ 2,796,400	$ 1,957,480
	3	BioCorridor Water Line Improvements	10%	100%	**90%**	$ 2,741,200	$ 2,467,080
	4	Water Supply Well No. 10	0%	95%	**95%**	$ 19,223,900	$ 18,262,705
	5	Harvey Mitchel Parkway Water Line Replacement	70%	90%	**20%**	$ 4,236,400	$ 847,280
					Proposed Future Project Subtotal	$ 31,287,400	$ 24,450,345
					Total Impact Fee Eligible Water Capital Improvements Cost	$ 67,722,554	$ 43,760,813

Existing Utilization is > 0% for projects meeting deficiencies and existing projects serving existing customers.

Impact Fee Calculation – Eligible Wastewater CIP Cost

Determine Utilization Percentages - Wastewater

No.		Description of Project	Percent Utilization			Costs Based on 2021 Dollars	
			2021	2031	2021-2031	Capital Cost	10-Year (2021-2031)
Recently Completed	A	Royder/Live Oak Sewer Service	15%	25%	**10%**	$ 1,691,256	$ 169,126
	B	Bee Creek Interceptor Phase 1 and 2	75%	95%	**20%**	$ 8,472,421	$ 1,694,484
	C	Lick Creek Trunk Line	40%	75%	**35%**	$ 14,020,058	$ 4,907,020
	D	Medical District Trunk Line Phase 1 (Participation Agreement)	30%	65%	**35%**	$ 1,770,375	$ 619,631
	E	Northeast Trunk Line Phase 1 and 2	75%	90%	**15%**	$ 6,558,738	$ 983,811
	F	Southwood Valley Trunk Line Phase 1	95%	100%	**5%**	$ 1,518,488	$ 75,924
	G	18-Inch Harvey Road Gravity Line	5%	30%	**25%**	$ 188,790	$ 47,198
	H	Creek Meadows Lift Station Upsizing and Force Main	0%	60%	**60%**	$ 212,587	$ 127,552
	I	Nagle Street Student Housing Oversize Participation	75%	100%	**25%**	$ 26,854	$ 6,714
		Recently Completed Project Subtotal				**$ 34,459,567**	**$ 8,631,460**
Ongoing	J	Bee Creek Interceptor Phase 3	75%	95%	**20%**	$ 3,900,000	$ 780,000
	K	Medical District Trunk Line Phase 2 and 3	85%	95%	**10%**	$ 3,250,000	$ 325,000
	L	Northeast Trunk Line Phase 3 and 4	75%	95%	**20%**	$ 13,861,000	$ 2,772,200
	M	Carters Creek Diversion Lift Station Phase 1	0%	75%	**75%**	$ 13,900,000	$ 10,425,000
	N	Lick Creek WWTP Phase 1 Expansion	10%	100%	**90%**	$ 39,014,049	$ 35,112,644
	O	2021 Impact Fee Update	0%	100%	**100%**	$ 174,150	$ 174,150
		Ongoing Project Subtotal				**$ 74,099,199**	**$ 49,588,994**
Proposed	1	15/18/24/30/36-inch Southwood Valley Interceptor Phase 1 and 2	95%	100%	**5%**	$ 7,314,800	$ 365,740
	2	18/21/24-Inch Bee Creek Trunk Line Phase 4	80%	95%	**15%**	$ 5,357,800	$ 803,670
	3	18/21-Inch Alum Creek Sewer Trunk Line	45%	60%	**15%**	$ 11,136,600	$ 1,670,490
	4	8-Inch Creek Meadows Force Main Re-Routed to Alum Creek Trunk Line	80%	100%	**20%**	$ 2,517,900	$ 503,580
	5	Lick Creek WWTP Phase 2 Expansion (to 8.0 MGD)	0%	5%	**5%**	$ 49,946,000	$ 2,497,300
	6	21/24-Inch Harvey Road Replacement Gravity Line	20%	45%	**25%**	$ 4,916,300	$ 1,229,075
		Proposed Future Project Subtotal				**$ 81,189,400**	**$ 7,069,855**
		Total Impact Fee Eligible Wastewater Capital Improvements Cost				**$ 189,748,166**	**$ 65,290,309**

Impact Fee Calculation – Rate Credit

Rate Credit Calculation:

- A credit analysis was performed to determine the maximum impact fee per LUE allowed by state law

Portion of Project Funded by Cash

Impact Fee Eligible %

Impact Fee Eligible Bond Issue %

Project No.	Bond Issue and Project(s) Funded	Capital Cost	Funded by Cash	Capital Cost Financed	Projects % of Overall Bond Issue	% of Project that is Impact Fee Eligible	% of Bond Issue that is Impact Fee Eligible
	Series 2018 CO			**$10,000,000**			**17.1%**
C	*Lick Creek Trunkline*	$14,020,058	$570,058	$2,647,000	26.5%	35%	
E	*Northeast Sewer Trunkline PH 2*	$2,797,362	$0	$500,000	5.0%	15%	
L	*Northeast Sewer Trunkline PH 3*	$5,900,000	$1,600,000	$500,000	5.0%	20%	
D	*Medical District Trunkline PH 1*	$1,770,375	$20,375	$1,750,000	17.5%	35%	
	Series 2019 CO			**$23,906,000**			**45.6%**
N	*Lick Creek WWTP Expansion*	$39,014,049	$10,514,049	$8,843,000	37.0%	90%	
M	*Carters Creek Diversion Lift Station*	$15,900,000	$60,000	$2,340,000	9.8%	75%	
C	*Lick Creek Trunkline*	$14,020,058	$570,058	$1,303,000	5.5%	35%	
F	*Southwood Valley Trunkline*	$1,518,488	$0	$1,479,000	6.2%	5%	
J	*Bee Creek Parallel Trunkline PH 3*	$3,900,000	$0	$800,000	3.3%	20%	
E	*Northeast Sewer Trunkline PH 2*	$2,797,362	$0	$1,370,000	5.7%	15%	
L	*Northeast Sewer Trunkline PH 3*	$5,900,000	$1,600,000	$568,000	2.4%	20%	
L	*Northeast Sewer Trunkline PH 4*	$7,961,000	$11,000	$900,000	3.8%	20%	
O	*2021 Impact Fee Study*	$174,150	$0	$0	0%	100%	-

Impact Fee Calculation – Rate Credit

Example of Rate Credit Calculation:

Debt Series	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Total Existing Eligible Debt										
Series 2018	$686,535	$688,285	$689,035	$688,785	$687,535	$690,160	$686,660	$687,285	$687,056	$685,723
Series 2019	$1,634,150	$1,633,150	$1,635,025	$1,634,650	$1,632,025	$1,632,025	$1,634,400	$1,634,800	$1,633,700	$1,630,800
Total	**$2,320,685**	**$2,321,435**	**$2,324,060**	**$2,323,435**	**$2,319,560**	**$2,322,185**	**$2,321,060**	**$2,322,085**	**$2,320,756**	**$2,316,523**
Impact Fee Eligible Portion of Existing Eligible Debt										
Series 2018: *17%*	$117,669	$117,969	$118,097	$118,054	$117,840	$118,290	$117,690	$117,797	$117,758	$117,529
Series 2019: *46%*	$745,286	$744,830	$745,685	$745,514	$744,317	$744,317	$745,400	$745,583	$745,081	$743,758
Total	**$862,955**	**$862,799**	**$863,782**	**$863,568**	**$862,157**	**$862,607**	**$863,090**	**$863,380**	**$862,839**	**$861,287**

Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Wastewater Impact Fee Eligible Interest + Principle for 10-Year Period	$2,461,192	$2,464,801	$2,450,934	$2,366,322	$2,365,681	$2,365,725	$2,371,099	$2,369,629	$2,372,931	$2,360,225
Total Impact Fee Eligible LUEs Each Year	59,714	61,004	62,295	63,585	64,876	66,166	67,457	68,747	70,038	71,328
Cost per LUE	$41.22	$40.40	$39.34	$37.22	$36.46	$35.75	$35.15	$34.47	$33.88	$33.09
Cumulative Growth in LUEs in 10-Year Period	1,291	2,581	3,872	5,162	6,453	7,743	9,034	10,324	11,615	12,905
Portion Paid by Growth in 10-Year Period	$53,190	$104,283	$152,321	$192,104	$235,290	$276,846	$317,528	$355,856	$393,509	$427,023
Total Credit	$2,507,952									

Rate Credit = Sum of Annual Impact Fee Debt

Water Rate Credit: $1,966,603

Wastewater Rate Credit: $2,507,952

Impact Fee Calculation – Maximum Allowable

Water Impact Fee Calculation

Water Impact Fee	
Total Eligible Capital Improvement Costs	$43,760,813
Total Eligible Financing Costs	$12,663,228
Rate Credit	($1,966,603)
Total Impact Fee Eligible Cost(1)	**$54,457,437**
10-Year Growth in Water LUEs	14,044
Maximum Allowable Water Impact Fee per LUE(2)	**$3,877**

(1) Total eligible capital and financing costs minus the rate credit

(2) Total eligible costs divided by the growth in LUEs

Impact Fee Calculation – Maximum Allowable

Wastewater Impact Fee Calculation

Wastewater Impact Fee	
Total Eligible Capital Improvement Costs	$65,290,309
Total Eligible Financing Costs	$9,135,832
Rate Credit	($2,507,952)
Total Eligible Impact Fee Cost(1)	**$71,918,188**
10-Year Growth in Wastewater LUEs	12,905
Maximum Allowable Wastewater Impact Fee per LUE(2)	**$5,572**

(1) Total eligible capital and financing costs minus the rate credit

(2) Total eligible costs divided by the growth in LUEs

Schedule of Maximum Allowable Impact Fees

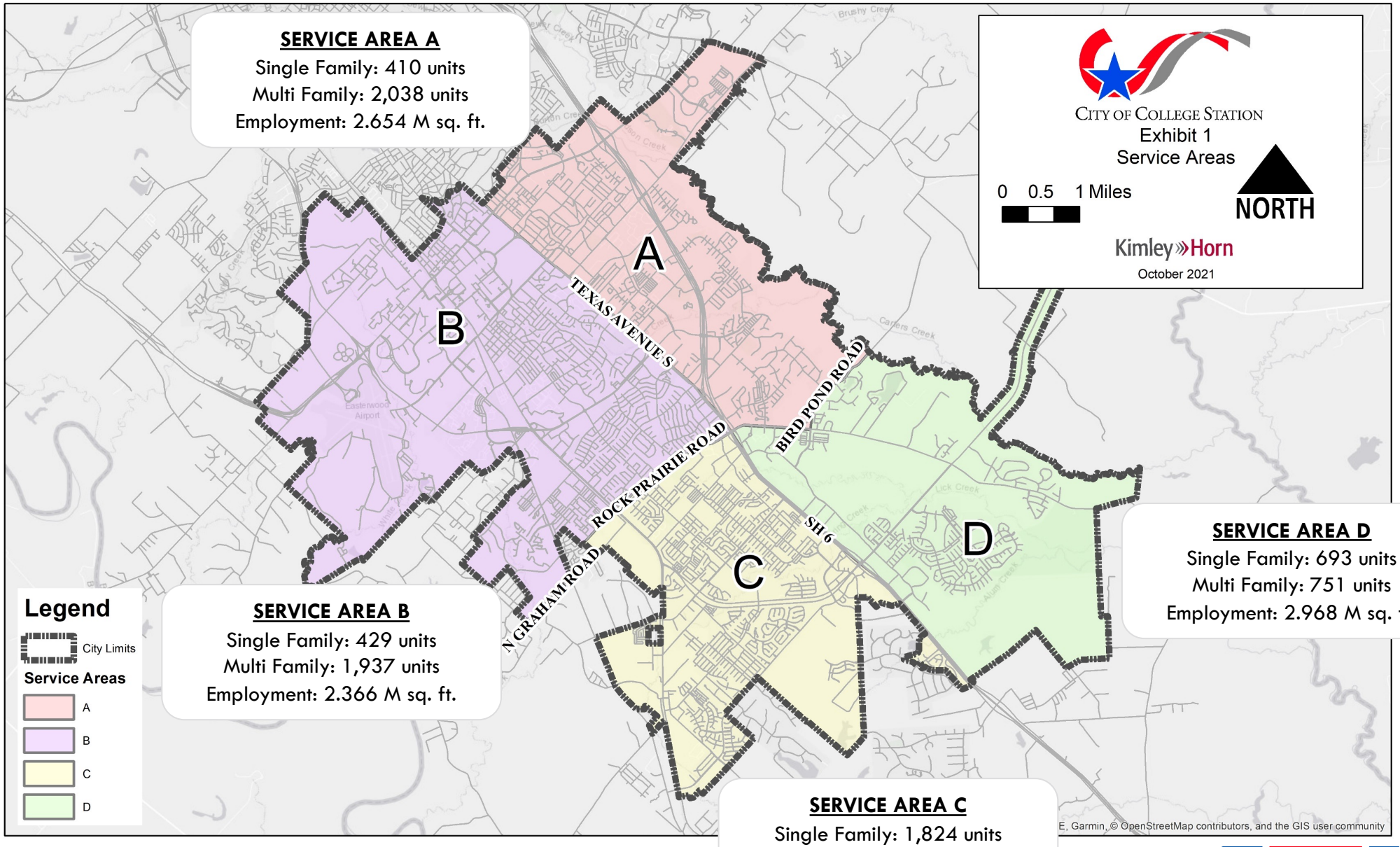
Meter Size	Living Unit Equivalent[(1)]	Maximum Allowable Impact Fees		
		Water	Wastewater	Total
5/8" x 3/4"	1.0	$ 3,877	$ 5,572	$ 9,449
1”	3.3	$ 12,923	$ 18,573	$ 31,496
1-1/2”	10.7	$ 41,354	$ 59,434	$ 100,788
2”	10.7	$ 41,354	$ 59,434	$ 100,788
3”	26.7	$ 103,386	$ 148,586	$ 251,972
4”	53.3	$ 206,773	$ 297,173	$ 503,946
6”	106.7	$ 413,546	$ 594,346	$ 1,007,892
8”	180.0	$ 697,860	$ 1,002,960	$ 1,700,820
10”	266.7	$ 1,033,866	$ 1,485,866	$ 2,519,732

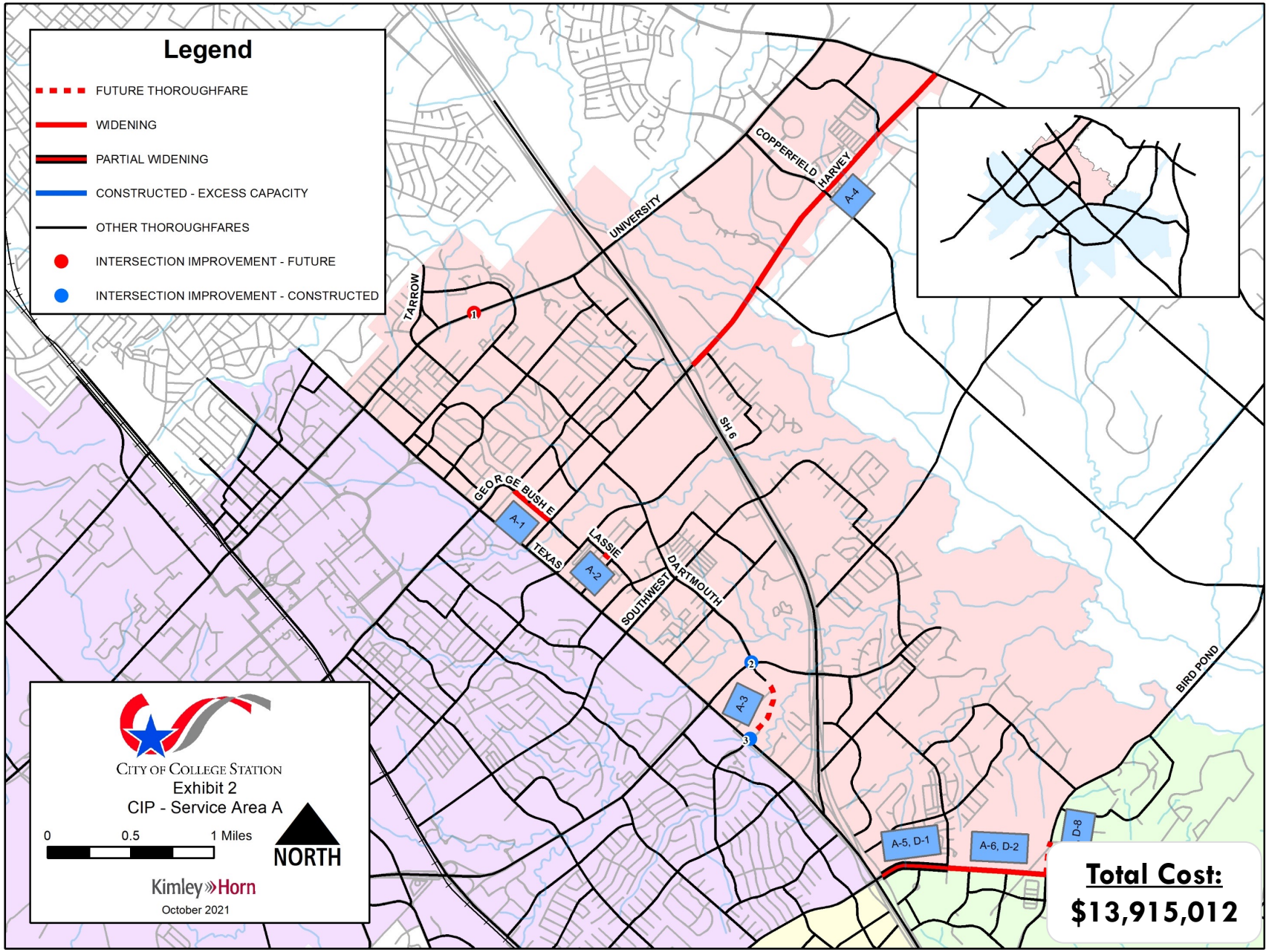
(1) Living unit equivalents shown as rounded to single decimal point.

City Council sets the actual fee to be collected from new development

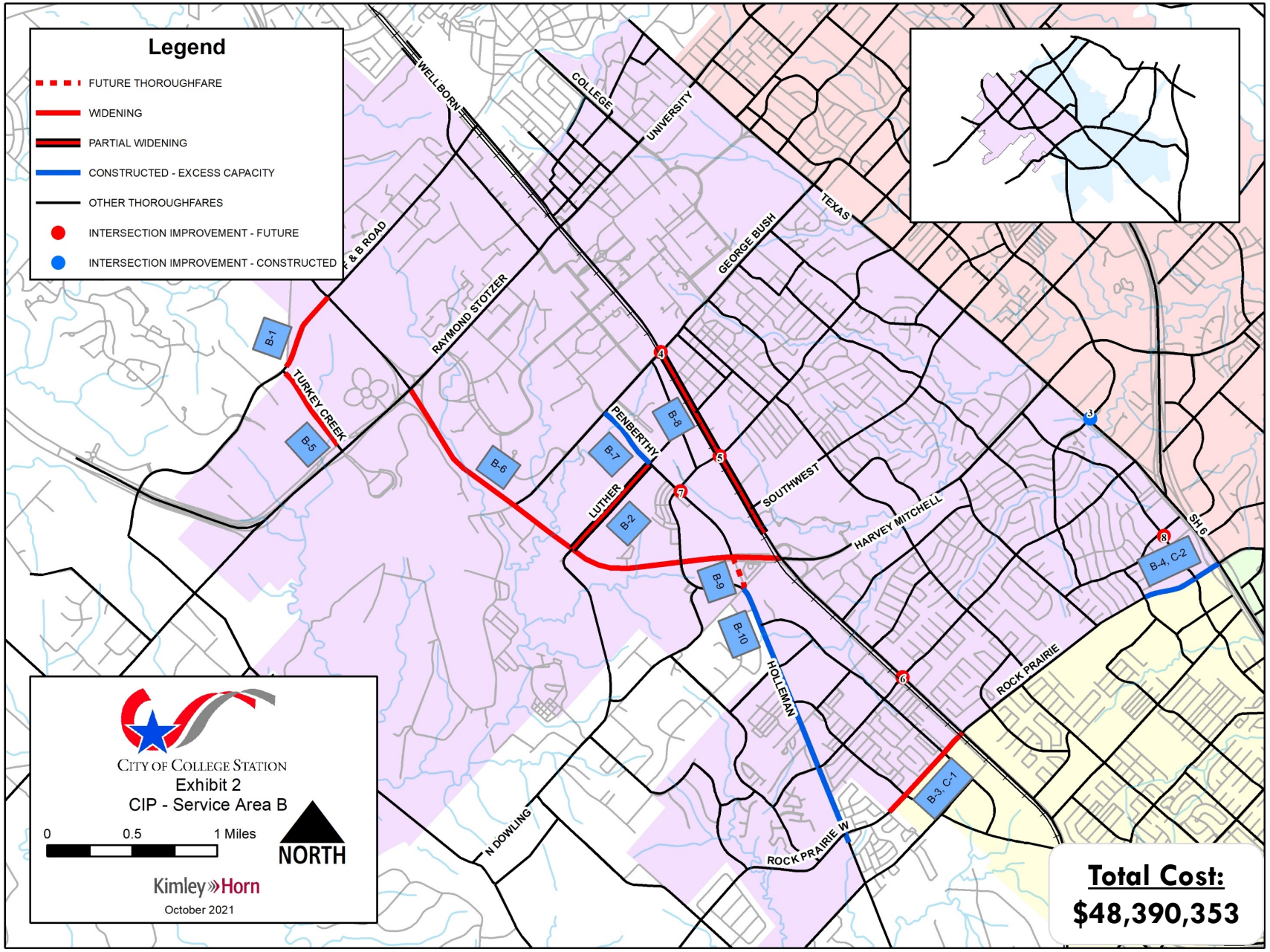
Roadway

Land Use, CIP, and Impact Fee Calculation

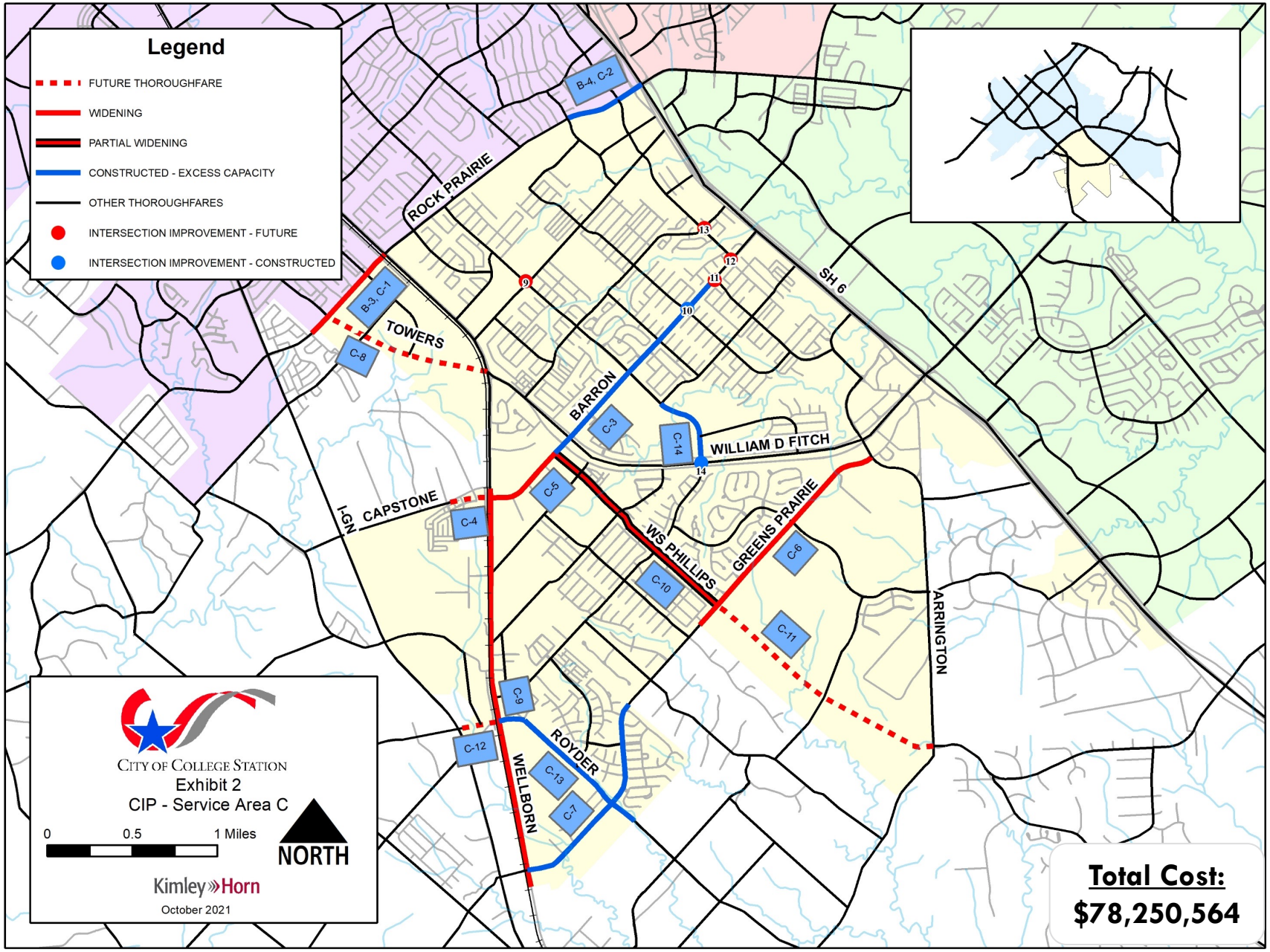

SERVICE AREA A
Single Family: 410 units
Multi Family: 2,038 units
Employment: 2.654 M sq. ft.
City of College Station
Exhibit 1
Service Areas
0 0.5 1 Miles
NORTH
Kimley»Horn
October 2021
A
B
C
D
TEXAS AVENUE S
BIRD POND ROAD
ROCK PRAIRIE ROAD
SH 6
N GRAHAM ROAD
Legend
City Limits
Service Areas
A
B
C
D
SERVICE AREA B
Single Family: 429 units
Multi Family: 1,937 units
Employment: 2.366 M sq. ft.
SERVICE AREA D
Single Family: 693 units
Multi Family: 751 units
Employment: 2.968 M sq. ft.
SERVICE AREA C
Single Family: 1,824 units
Multi Family: 127 units
Employment: 0.975 M sq. ft.
E, Garmin, © OpenStreetMap contributors, and the GIS user community


Legend
FUTURE THOROUGHFARE
WIDENING
PARTIAL WIDENING
CONSTRUCTED - EXCESS CAPACITY
OTHER THOROUGHFARES
INTERSECTION IMPROVEMENT - FUTURE
INTERSECTION IMPROVEMENT - CONSTRUCTED
TARROW
UNIVERSITY
COPPERFIELD
HARVEY
A-4
SH 6
GEORGE BUSH E
A-1
TEXAS
LASSIE
A-2
SOUTHWEST
DARTMOUTH
A-3
BIRD POND
A-5, D-1
A-6, D-2
D-8
CITY OF COLLEGE STATION
Exhibit 2
CIP - Service Area A
0
0.5
1 Miles
NORTH
Kimley»Horn
October 2021
Total Cost:
$13,915,012

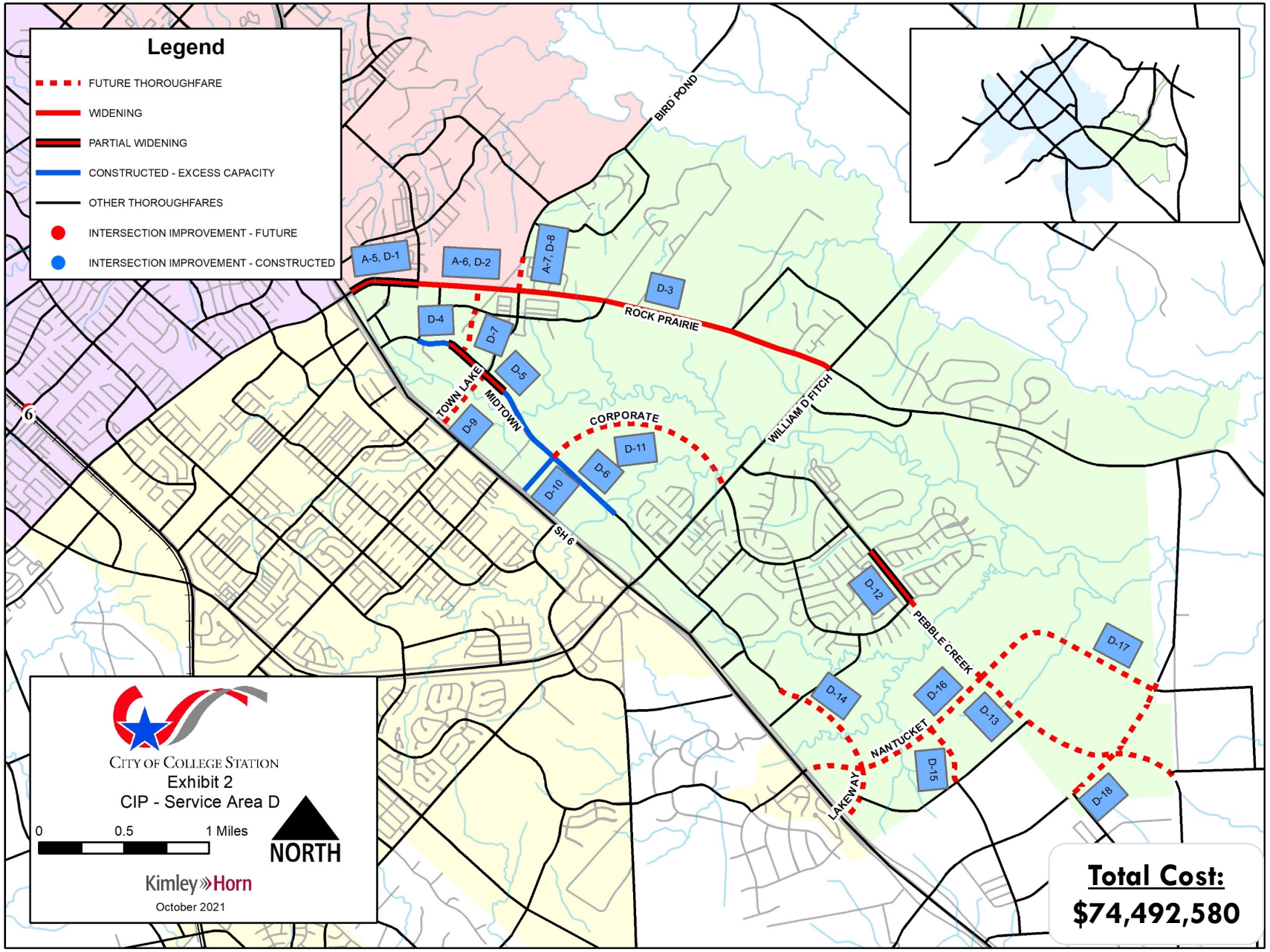
CIP
SA A


Legend
FUTURE THOROUGHFARE
WIDENING
PARTIAL WIDENING
CONSTRUCTED - EXCESS CAPACITY
OTHER THOROUGHFARES
INTERSECTION IMPROVEMENT - FUTURE
INTERSECTION IMPROVEMENT - CONSTRUCTED
WELL BORN
COLLEGE
UNIVERSITY
TEXAS
GEORGE BUSH
F & B ROAD
RAYMOND STOTZER
TURKEY CREEK
PENBERTHY
LUTHER
SOUTHWEST
HARVEY MITCHELL
SH 6
ROCK PRAIRIE
HOLLEMAN
ROCK PRAIRIE W
N DOWLING
B-1
B-2
B-3, C-1
B-4, C-2
B-5
B-6
B-7
B-8
B-9
B-10
CITY OF COLLEGE STATION
Exhibit 2
CIP - Service Area B
0
0.5
1 Miles
NORTH
Kimley»Horn
October 2021
Total Cost:
$48,390,353

CIP
SA B


Legend
FUTURE THOROUGHFARE
WIDENING
PARTIAL WIDENING
CONSTRUCTED - EXCESS CAPACITY
OTHER THOROUGHFARES
INTERSECTION IMPROVEMENT - FUTURE
INTERSECTION IMPROVEMENT - CONSTRUCTED
ROCK PRAIRIE
TOWERS
BARRON
I-GN
CAPSTONE
WILLIAM D FITCH
WS PHILLIPS
GREENS PRAIRIE
ROYDER
WELLBORN
ARRINGTON
SH 6
B-4, C-2
B-3, C-1
C-8
C-3
C-14
C-5
C-4
C-6
C-10
C-11
C-9
C-12
C-13
C-7
9
10
11
12
13
14
CITY OF COLLEGE STATION
Exhibit 2
CIP - Service Area C
0
0.5
1 Miles
NORTH
Kimley»Horn
October 2021
Total Cost:
$78,250,564

CIP
SA C


Legend
FUTURE THOROUGHFARE
WIDENING
PARTIAL WIDENING
CONSTRUCTED - EXCESS CAPACITY
OTHER THOROUGHFARES
INTERSECTION IMPROVEMENT - FUTURE
INTERSECTION IMPROVEMENT - CONSTRUCTED
BIRD POND
A-5, D-1
A-6, D-2
A-7, D-8
D-3
ROCK PRAIRIE
D-4
D-7
D-5
TOWN LAKE
MIDTOWN
D-9
CORPORATE
D-11
D-6
D-10
SH 6
WILLIAM D FITCH
D-12
PEBBLE CREEK
D-17
D-14
D-16
D-13
NANTUCKET
D-15
LAKEWAY
D-18
6
CITY OF COLLEGE STATION
Exhibit 2
CIP - Service Area D
0
0.5
1 Miles
NORTH
Kimley»Horn
October 2021
Total Cost:
$74,492,580

CIP
SA D

Service Units

A standardized measure of consumption attributable to an individual unit of development.*

Roadway

* Chapter 395 Definition

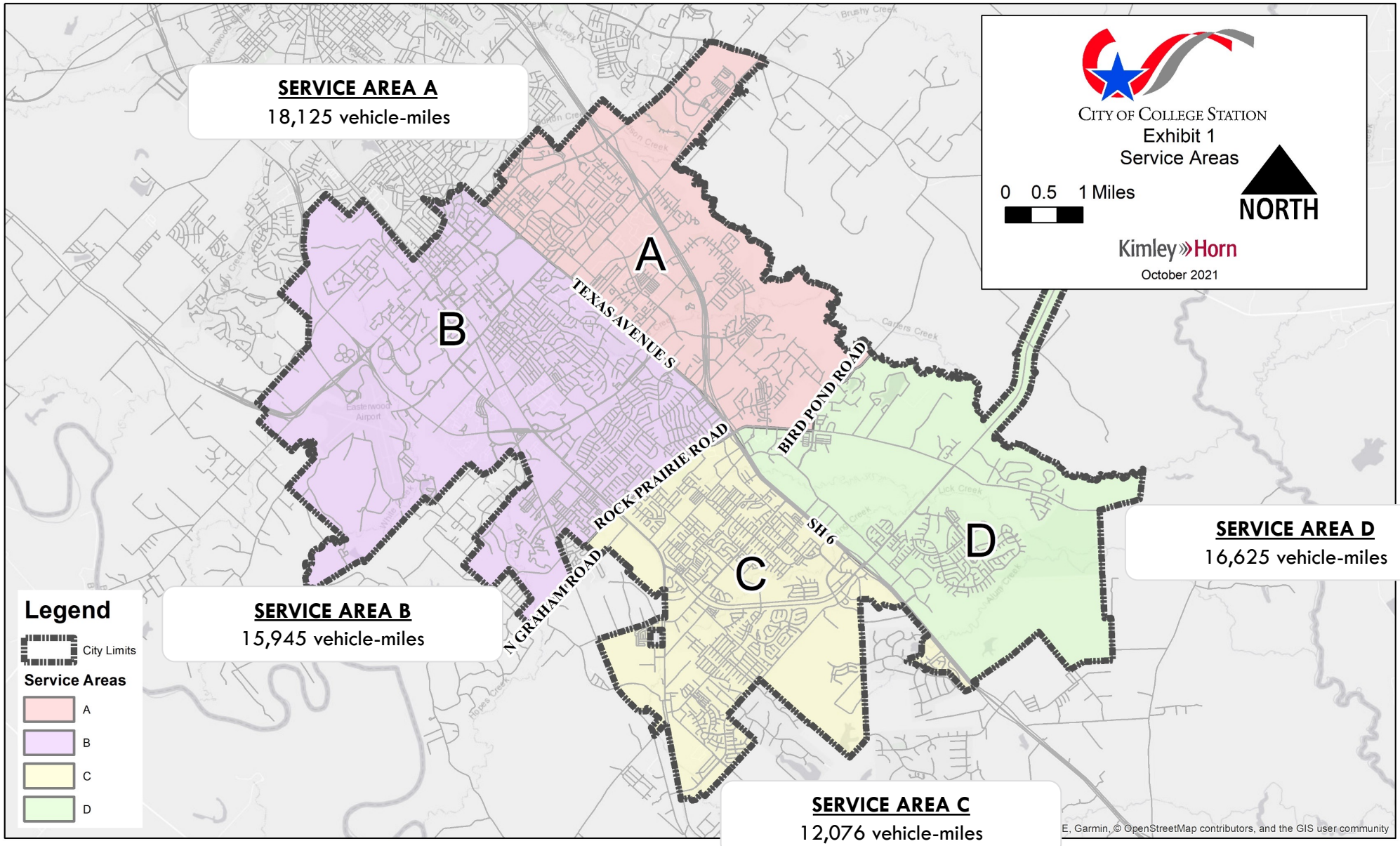
Roadway Service Units

Two Variables	
Trip Generation	Trip Length
ITE Trip Generation Manual 11th Edition	**National Household Travel Survey** **Legal Requirements from Chapter 395**

Roadway Service Units

ITE Land Use	Single-Family Detached Housing (ITE # 210)
Trips	0.94 Vehicles (PM Peak) *(ITE Trip Generation)*
X Trip Length	4.00 Miles
Vehicle-Miles	3.76 Vehicle-Miles

ITE Land Use	Shopping Center (ITE #820)
Trips	3.40 Vehicles (PM Peak) *(ITE Trip Generation)*
Reduction for Pass-by Trips	34% *(ITE Trip Generation Handbook)* 2.24 Vehicles (PM Peak)
X Trip Length	2.00 Miles
Vehicle-Miles**	4.49 Vehicle-Miles


SERVICE AREA A
18,125 vehicle-miles
CITY OF COLLEGE STATION
Exhibit 1
Service Areas
0 0.5 1 Miles
NORTH
Kimley»Horn
October 2021
A
B
C
D
TEXAS AVENUE S
BIRD POND ROAD
ROCK PRAIRIE ROAD
SH 6
N GRAHAM ROAD
SERVICE AREA D
16,625 vehicle-miles
SERVICE AREA B
15,945 vehicle-miles
SERVICE AREA C
12,076 vehicle-miles
Legend
City Limits
Service Areas
A
B
C
D
E, Garmin, © OpenStreetMap contributors, and the GIS user community

Roadway Cost Breakdown

Financing and Impact Fee Ad Valorem Credits to be applied

Service Area	Total Vehicle-Miles of New Demand	Estimate Total Cost Before Financing	Estimated Cost to Meet Existing Demand	Estimated Recoverable Cost of Total Impact Fee CIP	Excess Capacity Beyond 10-Year Window
A	18,125	$13,915,012	$4,526,758	$9,388,254	$0
B	15,945	$48,390,353	$22,708,116	$20,859,844	$4,822,393
C	12,076	$78,250,564	$18,441,098	$26,639,782	$33,169,684
D	16,625	$74,492,580	$7,229,646	$59,527,697	$7,735,237

9-23-2021 Today

Roadway Impact Fee Calculation

Determine the maximum assessable fee per service unit:

$$\text{Impact Fee Per Service Unit} = \frac{\text{Cost of CIP Attributable to Growth} + \text{Financing} - \text{Credits}}{\text{New Service Units}}$$

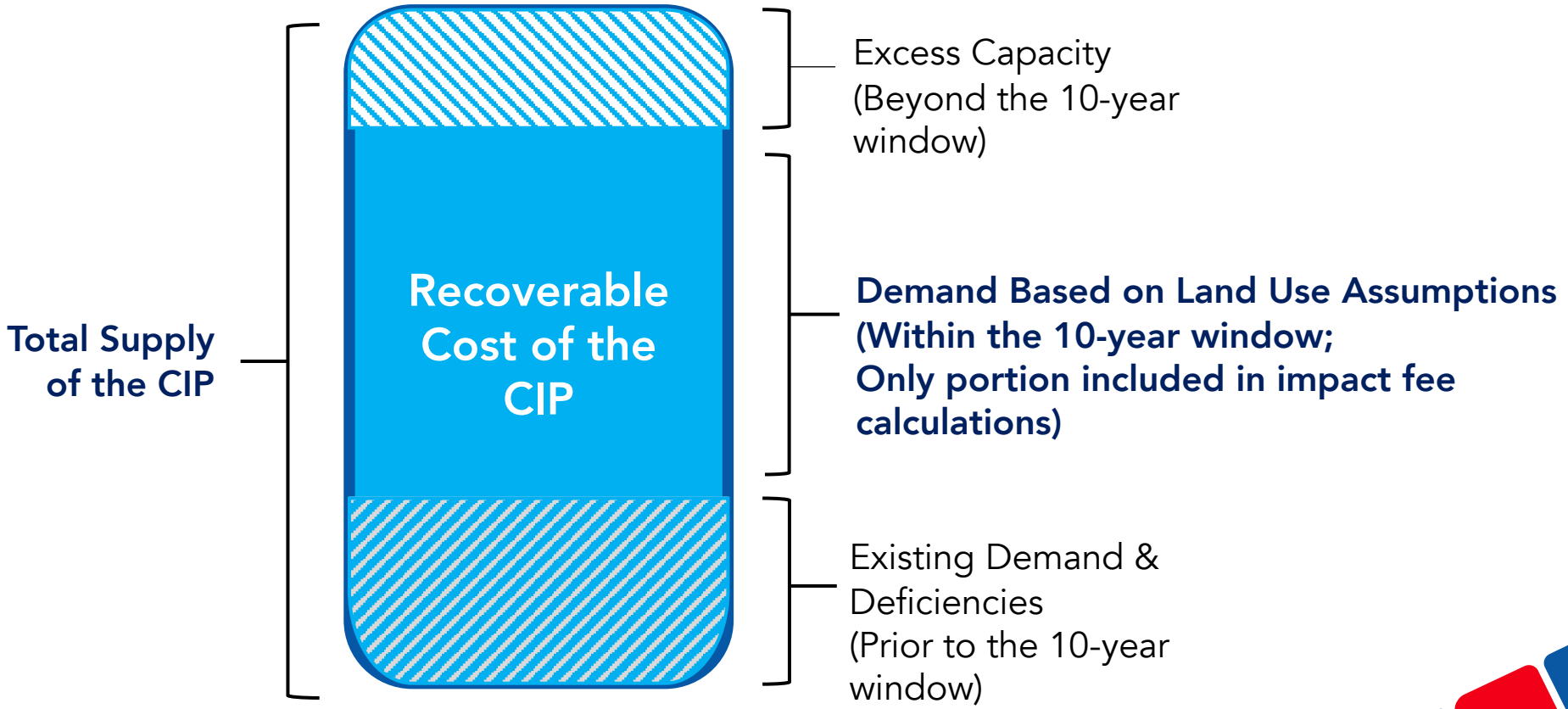
Roadway Service Area	A	B	C	D
Total Cost of Impact Fee CIP	$13,915,012	$48,390,353	$78,250,564	$74,492,580
Impact Fee CIP Cost Attributable to Growth	$9,388,254	$20,859,844	$ 26,639,782	$59,527,697
Financing	+$1,456,897	+$3,237,092	+$4,134,040	+$9,237,681
Interest	($131,440)	($292,040)	($372,960)	($833,390)
Credit of Ad Valorem	($1,661,061)	($3,690,731)	($4,713,374	($10,532,225)
Total Recoverable Cost (Attributable Costs + Financing - Credits)	$9,052,650	$20,114,165	$25,687,488	$57,399,762
Service Units	18,125	15,945	12,076	16,625
Max Assessable Impact Fee per Service Unit	**$499**	**$1,261**	**$ 2,127**	**$ 3,452**
Max Assessable Impact Fee per Single Family	$1,876.24	$4,741.36	$7,997.52	$12,979.52

IFAC Comments

Main IFAC Comments / Concerns

- Including completed capital projects in the study result in assessing fees/taxes for those projects multiple times (double dipping).
- Growth projections are below single-family historical trends.
- Growth projections may underestimate amount of residential in Roadway Service Area D.
- Unneeded capital projects are included in Roadway Service Area D.

Impact Fee Calculation



Growth Assumptions

- Methodology – available land and corresponding density, not specifically using historical permits
- Limited lots within large residential subdivisions within study area
  - Approximately 1,900 lots in Greens Prairie Reserve, Midtown, Mission Ranch, and Pebble Creek
  - Approximately 1,800 lots in Southern Pointe (not included in impact fee study)
- Classification of units – study vs. building permits
- Change in land use – residential vs. non-residential

Service Area D Land Use Scenarios

Land Use Assumptions – Draft (2021-2031)

Service Area	Single-Family (Units)	Multi-Family (Units)	Basic (Sq. Ft.)	Service (Sq. Ft.)	Retail (Sq. Ft.)	Vehicle-Miles
SA D (DRAFT)	693	751	984,000	1,089,000	895,000	16,625
SA D – Adjust for Midtown Projections	1,184	1,750	984,000	689,500	690,000	16,809

Nominal Change

Notes:

- Draft Report had less residential because more service/retail was assumed.

Roadway Impact Fee Calculation

Determine the maximum assessable fee per service unit:

$$\text{Impact Fee Per Service Unit} = \frac{\text{Cost of CIP Attributable to Growth} + \text{Financing} - \text{Credits}}{\text{New Service Units}}$$

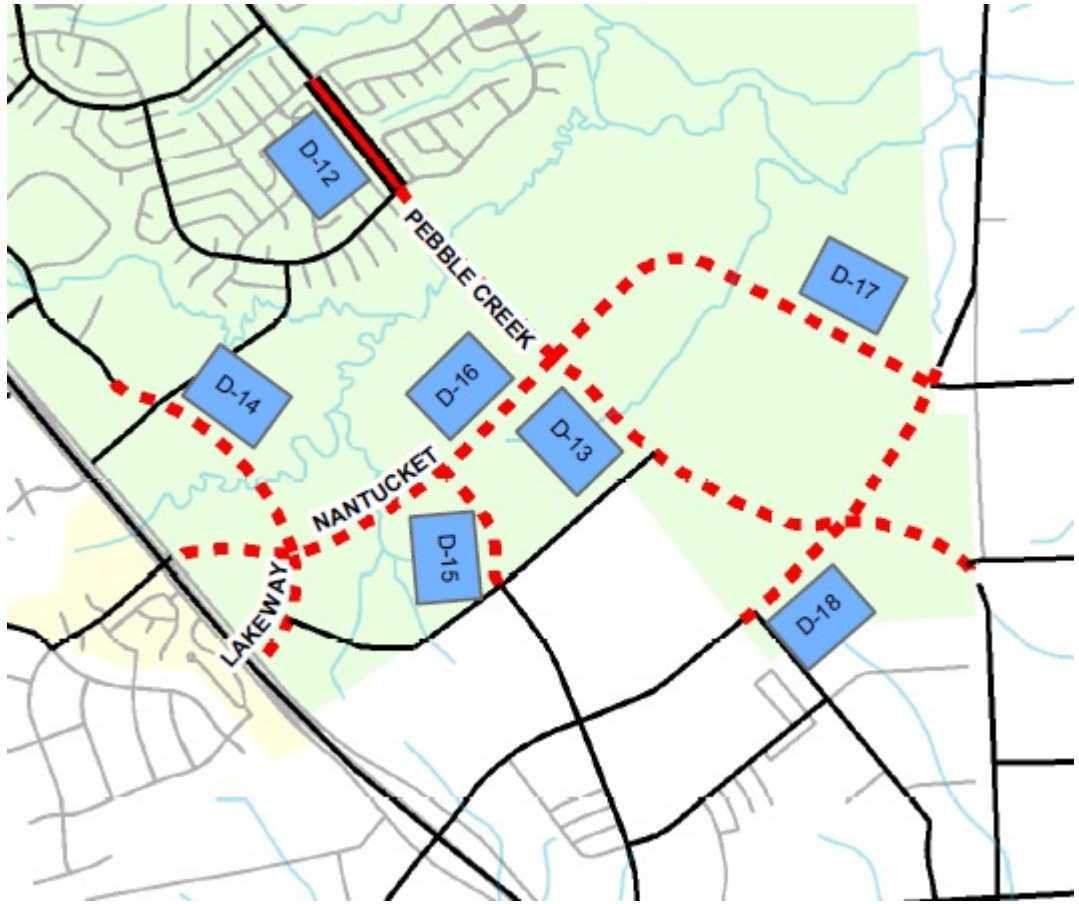
Roadway Service Area	D – Proposed Study	D – Adjust for Midtown Projections
Impact Fee CIP Cost Attributable to Growth	$59,527,697	$60,200,326
Financing	+$9,237,681	+$9,341,887
Interest	($833,390)	($842,805)
Credit of Ad Valorem	($10,532,225)	($10,617,492)
Total Recoverable Cost (Attributable Costs + Financing – Credits)	**$57,399,762**	**$58,081,914**
Service Units	**16,625**	**16,809**
Max Assessable Impact Fee per Service Unit	$ 3,452	$ 3,455
Max Assessable Impact Fee per Single Family	$13,669.92	$13,681.80

*Finance and Credit was estimated

Service Area D Roadway Adjustment

Scenarios:

- Remove the southern roadways
  - Projects D-13 to D-18



Roadway Impact Fee Calculation

Determine the maximum assessable fee per service unit:

$$\text{Impact Fee Per Service Unit} = \frac{\text{Cost of CIP Attributable to Growth} + \text{Financing} - \text{Credits}}{\text{New Service Units}}$$

Roadway Service Area	D – Proposed Study	D – If Projects D-13 thru D-18 Removed
Impact Fee CIP Cost Attributable to Growth	$59,527,697	$41,150,929
Financing	+$9,237,681	+$6.385.801
Interest	($833,390)	($576,113)
Credit of Ad Valorem	($10,532,225)	($7,257,763)
Total Recoverable Cost (Attributable Costs + Financing – Credits)	**$57,399,762**	**$39,702,853**
Service Units	**16,625**	**16,625**
Max Assessable Impact Fee per Service Unit	$ 3,452	$ 2,388
Max Assessable Impact Fee per Single Family	$13,669.92	$9,456.48

* Finance and Credit was estimated